

THE MEDINA OF SFAX

PRELIMINARY INVESTIGATION INTO ITS REGENERATION

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PREFACE

In a time when Humanity launches into the conquest of a universe whose limits are always expanding, in a time when extraordinary scientific progress no longer seems to know limits, the impassioned attention given by a handful of men into the maintenance of a small and apparently anachronistic city within the shelter of its useless but intact ramparts, can appear stripped of all significance.

However, these men are driven by an ambition equal to the measure of their efforts: that is to assure for the medina of Sfax the right to a authentic existence in the bosom of a world in [full mutation], infatuated with modernity, preoccupied by practical and immediate efficiency.

The absolute value that intrinsic beauty represents for traditional urban sites, their human significance and their spiritual radiance, in itself justifies every option being taken in favor of their conservation. To this can be added the powerful motivation of economic and cultural opportunities, including those rejected, underestimated, ignored or badly understood.

It is a question, in fact, of inserting into the chain of history - of our national history - the link formed by all the medinas, knowing that it is not essential to destroy to create and that it is perfectly possible, by dint of a little of imagination and unfailing persistence, to include in plans for a more audacious future the respect for the past heritage.

This firm belief enlivens those who, in Tunisia, undertook to campaign to save the medinas, in combination with the growing band of responsible town planners and architects who, around the world, dedicate their activities to preservation of humanity's cultural heritage, among which ancient cities represent a fundamental and irreplaceable element.

In this respect, these last years were decisive in Tunisia in that they saw the birth of several associations or research departments for maintenance and enhancement of the medinas, at the same time as UNESCO, preoccupied by the deterioration of historic centers, writes this problem into the agenda of one of its general assemblies.

To sensitize public opinion in these questions, to bring the citizens to a more clear realization of their personal responsibility regarding the historical and traditional heritage they

have inherited and to reinforce the conviction of regional and local authorities, the Minister of Cultural Affairs, receiving a suggestion from the Ancient Monuments department, succeeded in having Tunisia chosen as the seat of the 2nd Symposium of ICOMOS on the study of conservation, of restoration and the resuscitation of historical communities.

This symposium, which united the most distinguished specialists in the field, was an opportunity to introduce the experiments already performed in our country and to [throw the premises] of new attempts.

It is while the representatives for Ancient monuments take the decision to concentrate their efforts in the direction of Sfax where it was established that serious threats were affecting the ancient city, in spite of the establishment of an office of study for protection and enhancement of the medina. An operation of vast breadth was obvious. As in Kairouan, as in Tunis, it became urgent to undertake "radiography" of the architectural and socio-economic ancient urban framework, this information being brought together before specifying the options to be taken as interventions properly speaking and in the establishment of a plan with a view to revaluing the medina.

The study presented in "Monumentum" by M. Van der Meerschen is in the forefront of this campaign which is actively pursued in support of urban historical communities, by the Tunisian representatives involved. An architect and town planner, trained in the University of Louvain and in faculty of Architecture of Rome, specially trained to working in the milieu of ancient towns, Mr Van der Meerschen was kind enough to agree to join, for two years, in the team installed in Sfax by the department of Historic Monuments.

His dynamic presence has, without doubt, given new impulse to the action undertaken by the office of study, the effect of which is still perceptible, of which it does today by publishing the detailed account of the in depth inquiry led under his efficient direction.

The great merit of the work of M. der Meerschen is that it always comes from a constructive perspective. Observation, which is meant to be precise and objective as possible, is never free. The purpose is not knowledge for the pleasure of discovery of an anachronism, dying or, at the very least, condemned to an ineluctable and lethal sclerosis. Modern observer of historic cities, M. der Meerschen matches each information with a concrete proposal which translates his unshakeable faith in the future of the medina, by a harmonious integration within greater Sfax, of which it remains one of the original and irreplaceable modes of expression, even to the extent that they respect internal structures as scrupulously as visible. For him, it is a question of

reaching to impose the idea of a "peaceful coexistence" between the units, nowadays incoherent, formed by the modern areas and the medina, this one being called to play a role of hyphen and not [repulsion]. If, in extreme cases (which he likes moreover to underline himself), resolutions recommended by M. der Meerschen seem to resemble Utopia, even this excess is not the expression of a certainty as much as for the viability of the medina, the affirmation of a belief firm and deep which is meant to be shared: the re-establishment of an temporarily confused equilibrium between residential, craft, commercial, cultural and religious functions, it is accomplishable; it must allow the medina to rediscover its internal unity by the complementarity of its various activities; having recuperated all aspects of its authentic personality, the medina will be from then on capable of coping with its specific role in the contemporary city and, from then on, to contribute to the promotion of regional unity.

We join here the ambition common to men who claim to build the future without disavowing the past. It is a noble and delicate undertaking which requires sensitivity, penetrating judgment, inexhaustible patience, an imagination tempered with humility. We hope that Mr. Van der Meerschen, and all those who have helped in the achievement of the mission for which this study constitutes an invaluable testimony, will find here the expression of our gratitude, shared, without any doubt, by all those who, sincerely attached to the traditional values they have inherited, know well that the essence of our Maghrebian medinas is not limited to survival, dull and decrepit, but to affirm, filled with the enthusiasm of a renewed youth, their will to live.

Tunis, July 24, 1971

Mohamed FENDRI

Director of Historic Buildings
and Archeological sites
of Tunisia

HISTORICAL INTRODUCTION

The town of Sfax, founded by the Arabs, supplanted ancient Taparura, which was located in the immediate surroundings of the current médina, if not exactly the same site.

Taparura (**ταφρούρα**), as well as Thaenae (**θιναι**), another Roman city in the littoral 10 km to the south of Sfax, are names with Greek consonance: this characteristic brings to suppose the existence, in the gulf of the Petite Syrte, of Hellenistic colonial accounts. Many archaeological testimonies also attest to a strong Punic establishment in the area. Located between Usula to the north and Thaenae at the south, Taparura is represented in the table of "Peutinger" as a castle - identical to those of Hadrumète (Sousse) and of Tacape (Gabès). It was thus an important station on the great North-South way which skirts Tunisian coast. In the 5th century, Taparura became a diocese, and then disappears from the chronicle for the troubled period which followed, to reappear with the 9th century under the name of Sfax.

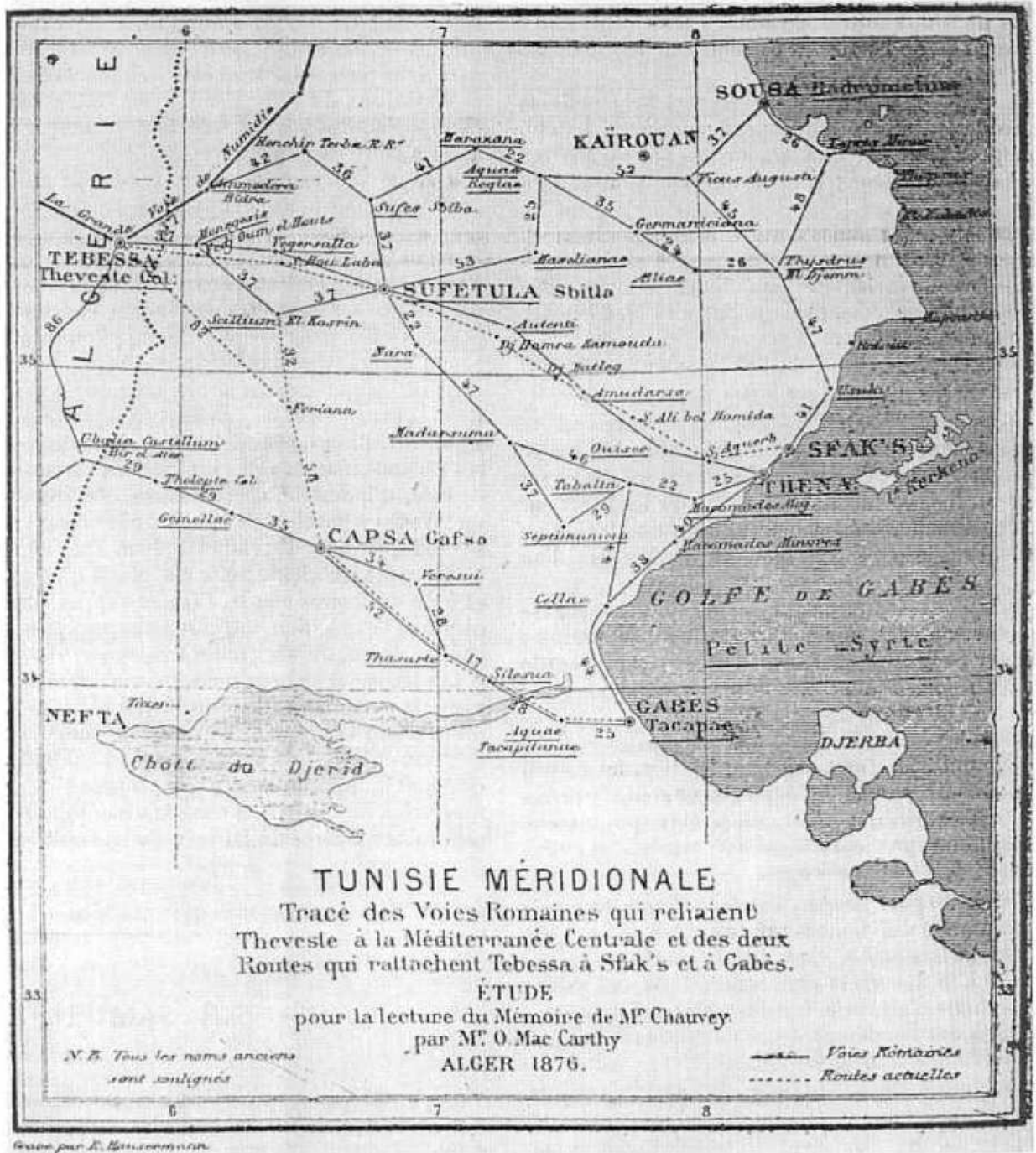
The first manifestations of the incorporation of the city into Islamic world appear with the arrival of Aghlabites. It is, indeed, to the liberality of Cadi Salem el Jebenyâni, son of a senior official of the reigning emir, that Sfax owes the erection of a fortified enclosure and the foundation of a large mosque which Ibn Maqdich assures us was completed in 849. As is usual with vestiges of this time, the city has preserved some elements of the large mosque (two columns with koufic inscriptions, certain internal structures of the minaret), part of the ramparts, the gate Bab Djebli as well as the Aghlabite basin in the zone of cisterns to the north of the city.

In the course of the 10th century, Sfax experienced a vigorous destiny of which the most painful episode occurred in 912, with the plundering of the city which marked the raid launched by Sicily. In the year 988, mentioned in one inscription engraved on the principal frontage of large mosque, the building profited from a restoration campaign ordered by the second Ziride emir El Mansour, who controlled then Tunisia while being accountable to his Fatimid suzerain installed in Cairo. For a time in the middle of the 10th century, Ziride Ifriqya again became autonomous while being detached from the Eastern supervision of the Fatimids. To be avenged, they released onto the country the terrible tribes of Beni Hilal. Mancour el Berghwati, governor

of Sfax, profited from these circumstances to declare independence. Hammou Ben Melil, his cousin, succeeded him, after having murdered him in his bath. An inscription on this Eastern facade attests to important work on the grand mosque (1085). Two products make the fortune of Sfax in this time of prosperity: oils of its olives that were exported to Egypt, the Maghreb, Sicily and Italy, as well as its cloths which were pressed and glossy according to processes borrowed from Alexandria. In 1099, the city fell under the Ziride rule.

The first half of the 11th century is marked by the intervention of Norman of Sicily who, after having taken Jerba, ended up occupying all the maritime regions, Sfax included (1146-48). It is during this state of disorder that the Almohade conquest surprised Ifriqiya. In Sfax, sheik Omar Ben Ali el Hassan Al Ferriyani, who had succeeded in driving out the Normans, renewed his allegiance to the Almohade, remained in power. In 1203 there was an Almoravide interlude in Ifriqiya: Yahya ibn Ghaniya el Mayorqui established himself in Gabès and took from the Almohades several great urban centers including Sfax. Three years later, the city was taken again by the armies of the caliph In-Nacir, who, before regaining Marrakech, decided to entrust the government of to one of his faithful lieutenants. But the son and successor of this last seized the first pretext come to free himself from Almohade rule: the Hafsids dynasty was born (1229).

The end of the 12th century sees the country collapse under the combined blows of Christians and nomads. Sfax was deprived of its pastures following the capture of the Kerkennah islands by the Sicilian and Aragonese fleet of Roger de Loria (1287). In 1306, at the time of his journey, the geographer Tijani informs us that Sfax is a town of the first order, having two distinct ramparts, [in the middle they] obtain by treaty the right to have a fondouk in Sfax. Abou Yahya Abou Bekr finally restores the Hafsids unity and retakes Kerkennah from the Christians (1335). Peace returned to the country to be disturbed only by rare episodes of which most significant began with the capture of Sfax by the dissenting brothers, Ahmed and Abdelmalek Ben Makki. Already masters of Tripoli, Gabes, Jerba and Kerkennah, the two men controlled practically all the Tunisian South. To shelter their small kingdom from the frequent menace of the Republic of Venice, Ahmed Ben Makki judged it wiser to authorize a pact of friendship and trade with him, which appeared advantageous to the two parties. It was only about 1370, with the advent of the caliph Abul-Abbas, craftsman of the restoration of central power, that Sfax returned to the Hafsids fold.



In the medina, at Bab Diwan, the southernmost door, an inscription attests that it was rebuilt in 1306, while the opposite door, Bab Djebli, was restored under the reign of Abou Paris (1394-1434).

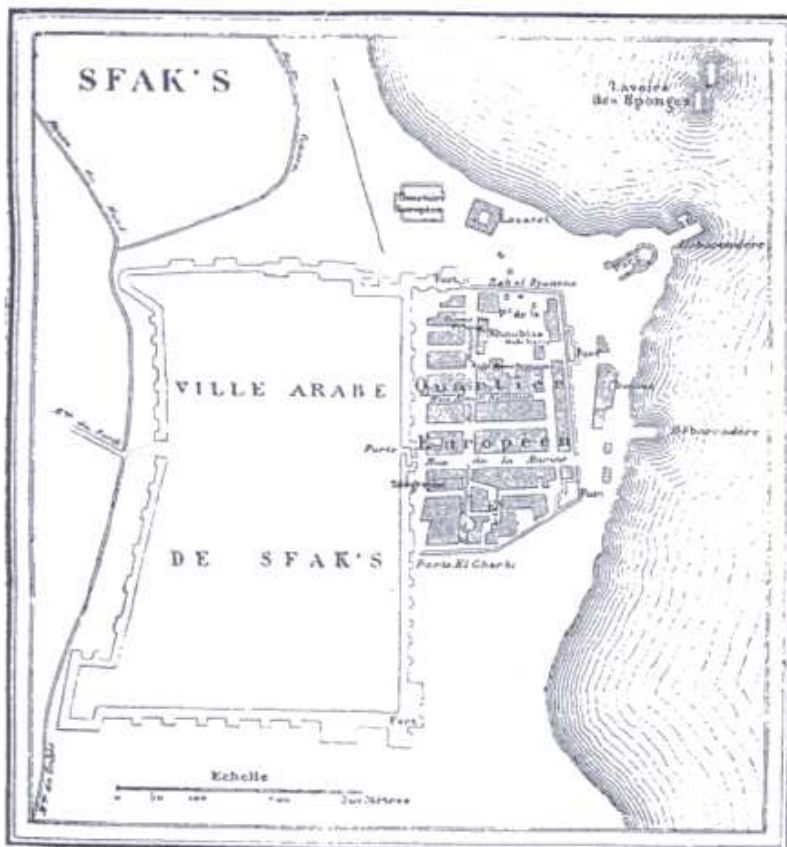
After more than three centuries which had seen the preponderance of the Hafsiids maintained, the shock between the Turks and the Spaniards was going to precipitate the fall of

their dynasty. In 1534, the corsair Barbarossa enters Tunis, proclaims the fall of the Hafsids and easily rallies the cities of the coast, among them, Sfax. [Too little, too late]? Charles-Quint seized in his turn the capital of Ifriqiya and restores Moulay Hassan on his throne. It would take the intervention of Doria to return Sfax to the Hafsids. But in 1549, the city give itself to the corsair Dragut as one of his bases. At that time, Leon the African affirms that Sfax is reduced to three or four hundred fires and does not count any more than a low number of shops. The city accommodates many Morisques driven out of Spain.

The Spaniards leave Tunisia definitively in 1573. From this moment, Sfax experiences a difficult period, as two inscriptions, going back respectively to 1619 and 1646 attest, which record successive rebuildings of Bab Diwan, the fortified gate. It is necessary to await the 18th century to find the capacity for political stability and hereditary power in Tunisia. The founder of the new dynasty, Hussein, gave to the country undeniable economic prosperity. In Sfax, the mosque was enlarged to its original extent; the new mihrab dates back to 1758, and work was finished in 1783. The ramparts were restored and the two large reservoirs were constructed to compensate for the cisterns of Nasriah. In 1776, the southern suburb of the city is built, the Frankish district, reserved for Jews and Christians, center of the maritime trade, but which was also useful as a shield against the much-feared attack by sea. The eventuality was not long in

occurring, the Venetians bombarding Sfax four times in the space of two years (1785-86). During the siege the large fort was built that flanked Borj Ennar; it was demolished after the last war.

About 1830, the Frankish district was surrounded by a wall and in the 1860 the city is equipped with a post and telegraph office. In 1876, the employee of the telegraphs makes a plan of the city and tells us of a signal tower built a century earlier of which we have now lost the trace.



During the last two centuries, the city became surrounded with suburbs of gardens, in which one finds buildings (borj), typically constructed on one floor. These are truly square towers of which the high silhouette dominates the gardens. They were used as a second residence for the townsmen during the summer months, when heat makes life difficult in the medina: it is still a current practice today.

The treaty of Bardo (1881) which made Tunisia a French protectorate provoked the beginning of a popular insurrection in the center and south. At Sfax, on June 18, 1882, the insurrectionists rose in arms in the Frank district and held some of the population. In reprisal, on July 15, a French squadron bombarded the city for two hours. The soldiers disembarked, set fire to Bab Diwan and invested the Kasbah. The return to a state of calm was restored gradually. On the plan of economic development, the protectorate was rather favorable to Sfax insofar as it has created the phosphate extraction of Gafsa which has its outlet there, and also helped with the extension of the olive orchards in the back-country and connected Sfax to the remainder of Tunisia by railways. Lastly, the city was equipped with a modern port dug from the mud which presents this double originality of not needing works of protection, the swells and the waves expending themselves in the shallow waters of Kerkennah - and this was preceded by a 5 km long dredged channel that the tidal ebb and flow contributes to maintain.

INTRODUCTION TO THE PHYSICAL, ECONOMIC AND SOCIAL ENVIRONMENT OF THE AREA OF SFAX

1. Physical environment

a) The winds are preponderantly North, North-west. They are of marine origin, but do not generally reach the city until having crossed a more or less large extent of mountainous land. Strong winds blow mainly in spring, season when barometric depressions remain on the gulf of Gabes.

b) The average temperature in January is 11.5° with a low of 0° once every 10 years; the average temperature of July is of $26,5^{\circ}$ with a high above 40° once every 10 years.

c) The rain is the fundamental factor for the agriculture; the area of Sfax is located between the isohyet 200 and 275. In lower part of 200 mm, the dry culture of the olive-tree becomes impossible. Rains of the autumn and of the winter are always most abundant.

d) The average relative moisture is from 83% at 6 a.m.; 62% at 12 noon; 74% at 6 p.m.

e) The land, for the major part light, returns possible the cultivation of olives in spite of the low availability of water.

f) There is no course of perennial water; the problem of the search for subterranean water is thus primordial. Various drillings provide a flow of 800 liters/second. The drinking water arrives from Sbeitla by 155 km of pipe.

2. Economic environment

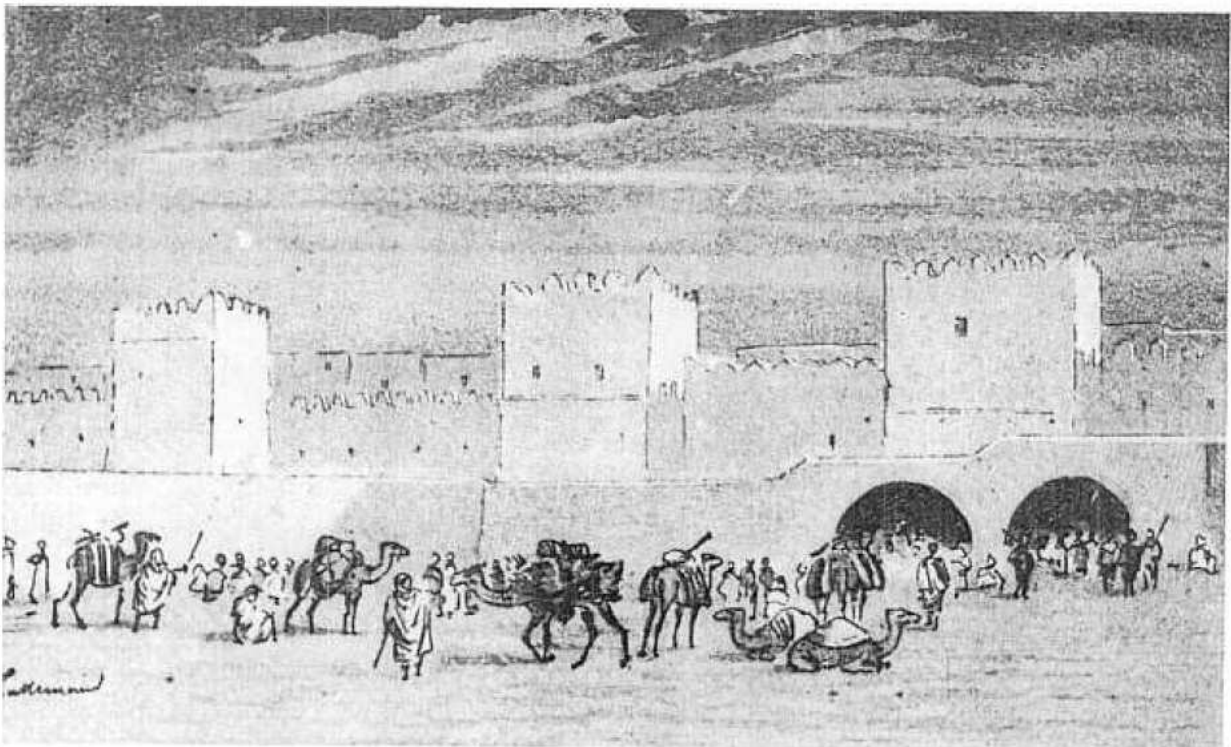
a) The agriculture remains the most important economic sector: 65% of the ground is cultivated, of which half is covered of olive-trees. The cultivation of cereals is rather weak.

b) The breeding is very restricted.

c) Fishing is an important sector. Fishing with sponges is one of the specialities of Sfax.

d) Two principal sectors of industry are the oil mill and the transformation of phosphates. Let us note also similar activities, the extraction of salt and some manufacturing industries. Let us mention the sector of wood where small companies and craftsmen coexist. Of a similar structure, the shoe industry occupies nearly 1.000 people, most of them installed in medina.

Sfax is the largest concentration of craft and industrial activities of all the Tunisian south. However, in spite of the vastness of its back-country, it only occupies third place among the industrial towns of Tunisia, far behind Tunis and Sousse. Crafts and industry together do not provide work for more than 14% of the active population of the Sfaxienne conurbation. The Sfaxien craft industry has known a dazzling past and had an undeniable influence; the commercial area of the medina which covers more of a quarter of its entire surface confirms this. During the 19th century, progress of interior traffic and the development of settlements



around Sfax supported the rise of crafts production by enlarging the customers of Sfaxien craftsmen to the scale of all the area and even beyond. The opening of the port of Sfax and the penetration of the products of European manufacture had been the origin of the decline of the traditional Sfaxien craft industry, a decline accentuated by rapid development of a modern industry and of consumer good and equipment in Tunis and Sousse. The late and restricted introduction of this of type of enterprise in Sfax is the consequence of the extension taken by industries working for the exterior markets. The oil industry has mobilized largest part of the local capital and that has diverted until a recent date the production of consumer goods, while the phosphate processing industry functions without the help of capital nor of Sfaxiens businessmen. One or the other industries present the common character of only offering very limited possibilities of employment in the Sfaxien labor force. The recent discovery of underground oil in the area, if it proves profitable, could not but worsen the imbalance.



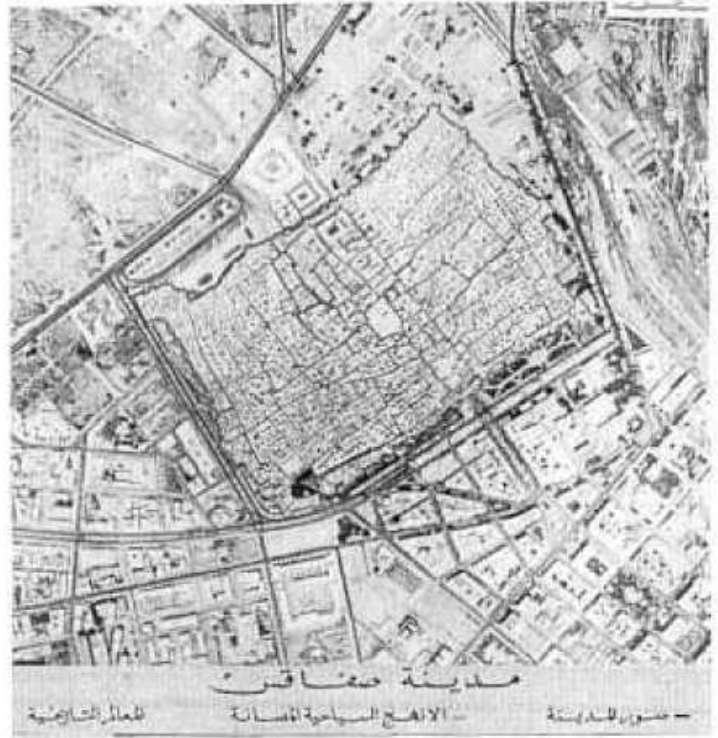


COMPREHENSIVE SURVEY OF THE MEDINA (24 hectares)

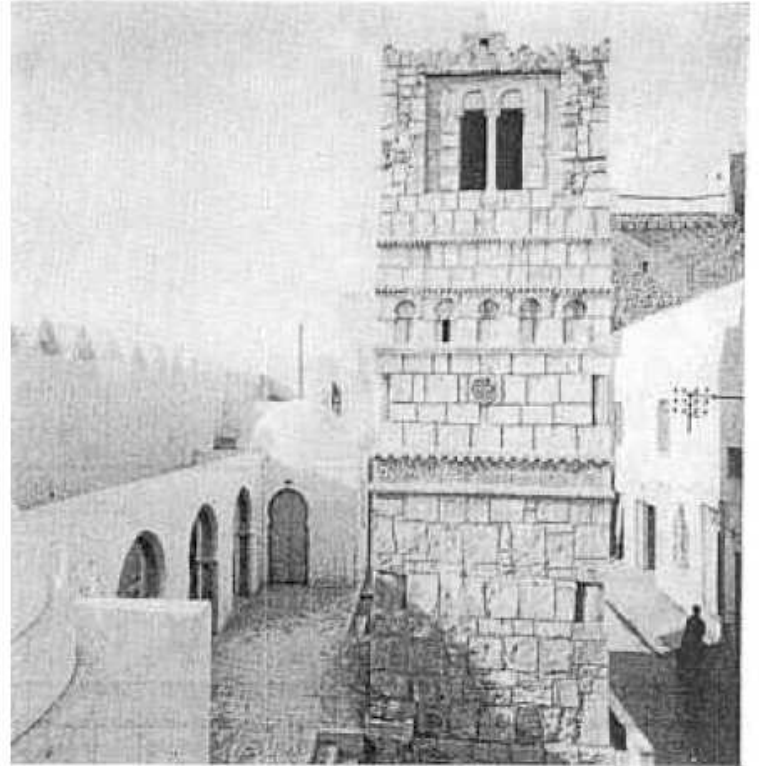
AT THE SCALE OF 1/250

The National Institute of Archaeology and Art proposed the study of the Tunisian medinas to carry out an architectural and socio-economic "radiographie" of each medina and its population. These surveys were established in Tunis and Kairouan as well as Sfax. They are a remarkable tool for all the studies present and future on the traditional urban habitat in North Africa. This work which is considerable was facilitated by the participation of the students of the School of the Art in Tunis.

In Sfax, the base of the survey is an overhead plan to scale. The architectural statement comprises both principal levels, such as the indication of the cellars. The structure of the habitat allowed the choice of a process without measurement and rapid, nevertheless



providing sufficient precision. In effect, terraces as well as patios were well delimited on the plan; otherwise complete and compact, any anomaly was automatically detected. The entry of the investigators into the houses did not cause major problems, the local authorities having intervened favorably with the population. One can even affirm that a similar operation would have raised more difficulties in Europe. Each shop or workshop, each home and each family were catalogued. The family survey included the following elements:

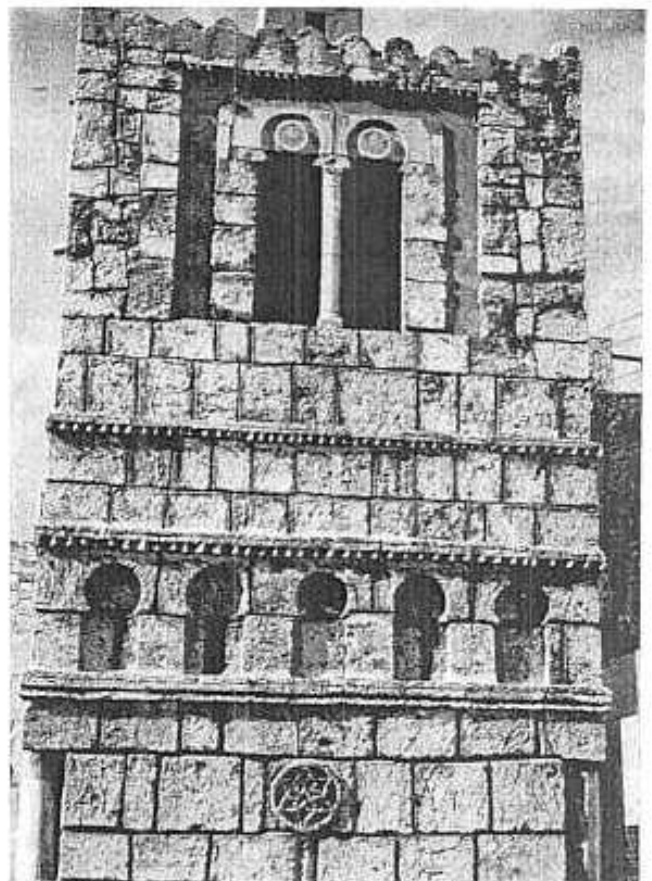


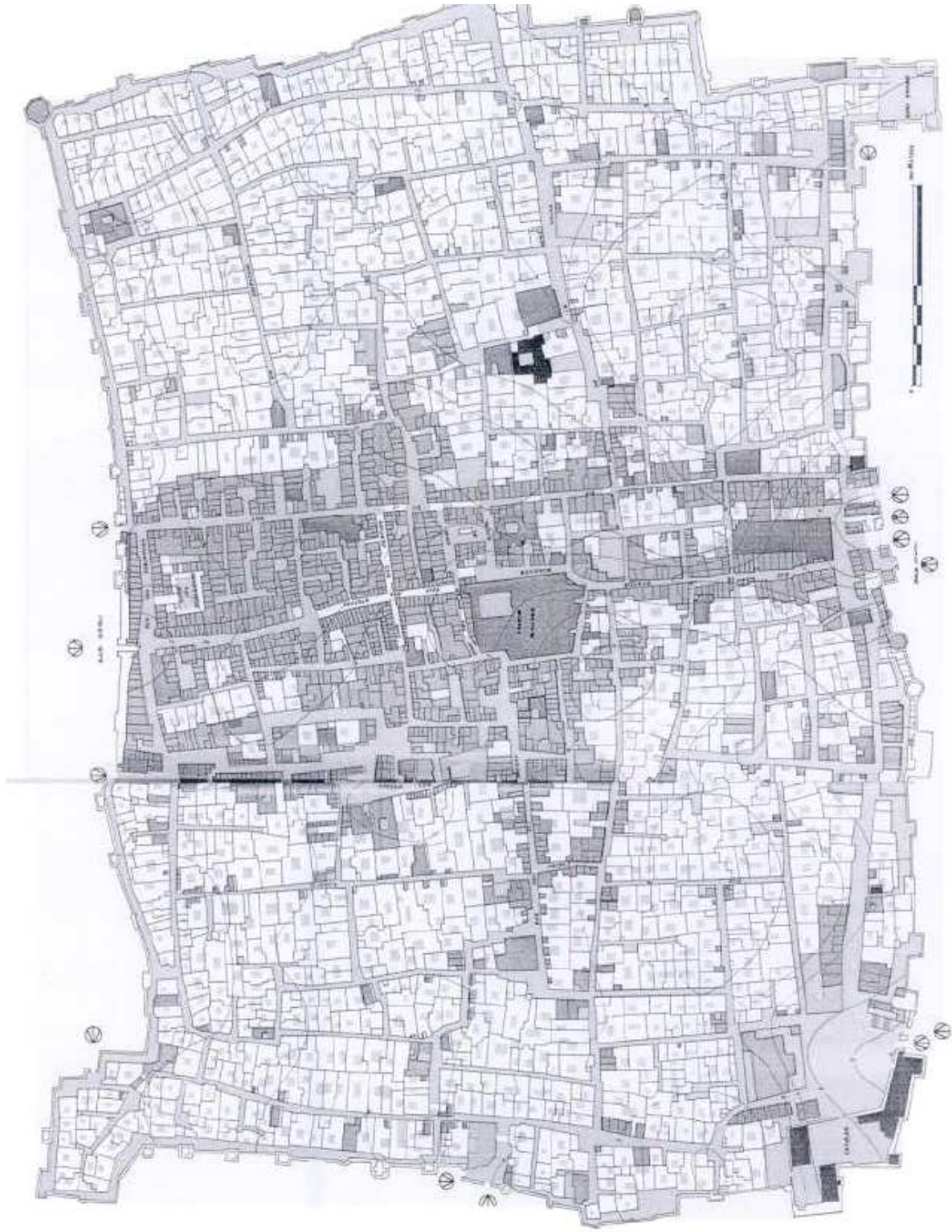
- name of the investigator and date of the inquiry;
- number of house and addresses;
- situation of housing: cellar, ground floor, 1st floor, upper floor;
- name of the head of household;
- year of his arrival with Sfax;
- year of his arrival in medina;
- geographic origin or history of his family;
- for the family members, including the head of household: number, sex, family ties with the chief, age, birthplace, profession, location of work, level of education, annual salary;
- mode of occupation of housing (property, rented, sub-leased), amount of rent, name of the owner;
- does the family resides in a garden (ghaba) during the summer?
- land property (garden, orchard, olive grove or other)?
- parents in Tunis? in Gafsa?
- would like you to live in a modern house out of the medina? Why?
- place of meeting of friends, of adults and of children?
- which of the family answered the questions?

The housing survey included the following elements:

- situation: number of the sector, number of the block, number of house, street name and number (cellar, ground floor, 1st stage, upper floor);
- name of the investigator and date of the inquiry;
- equipment of housing:
- connected to the sewer,
- water (goes away, well, cistern, current),
- W.C. (non-existent, [of fortune], with running water or tap, English),
- artificial illumination (non-existent, of fortune, electricity),

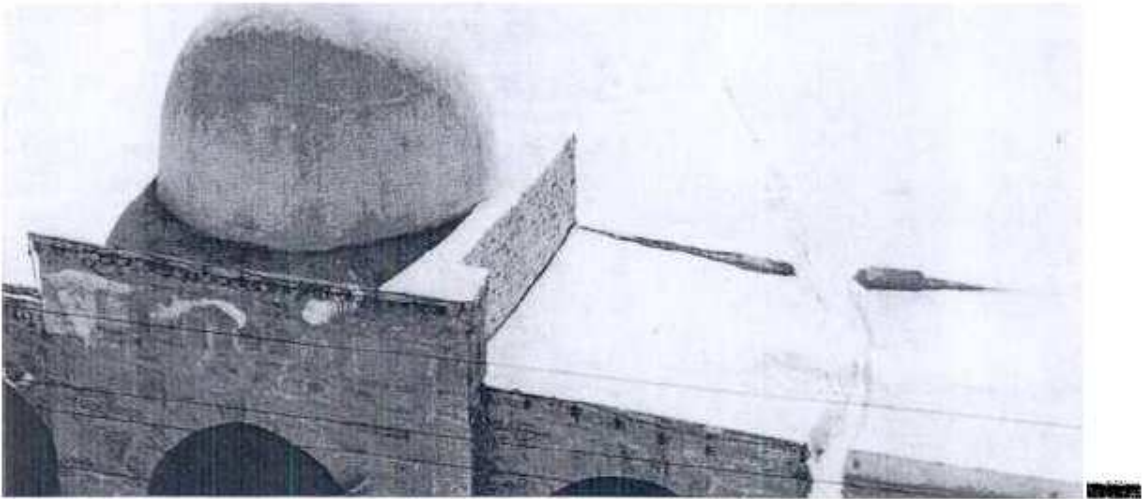
- various (radio, television set, refrigerator, telephone),
- kitchen (non-existent, of fortune, arranged, sink),
- cooking: kanoun (charcoal), babour (oil), stove (gas),
- medical (non-existent, sink, shower, bathroom),
- heating (non-existent, of fortune, with gas, with fuel oil, electric, central);
- many livable parts, of will maççoura, patios;
- inhabited surface, of service, boxroom or deposit, of patio;
- state of the structures (ruins, threatening ruins, advanced degradation, light degradation, satisfactory);
- date of construction, before or after war;
- historical and archaeological interest (4 categories);
- structure (masonry, framework);
- materials of the ceilings or floors (branches, wood, arch, reinforced concrete);
- furnishing (rudimentary, traditional, mixed, modern);
- Arab beds (alcoves), number;
- architectural elements of value, description;
- observations.





EN
de commerces
religieuses

sanitaires
culturelles
accueil





**The PILOT SECTOR (2 hectares)
SURVEY TO THE SCALE 1/100**

Its goal is double: foremost, to offer the possibility of to put in work a plan of restoration of this sector as soon as possible, also to make studies with a detail which requires a scale sufficiently large. The choice of its situation in the medina was motivated by its complexes structure (large mosque, marabouts, trade, craftsmen and dwellings). The presence of the Museum of Arts and Popular Traditions, Dar Djellouli, the core of a future arts centre, the abundance

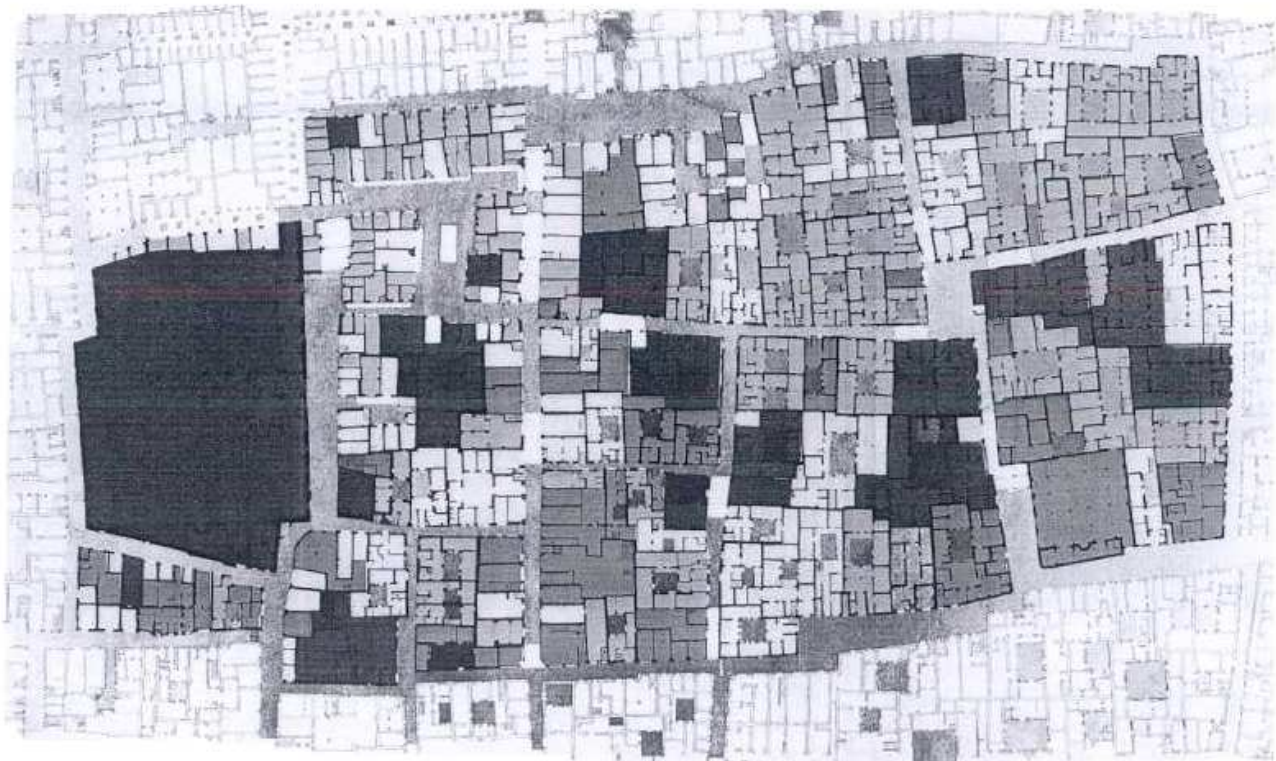
of houses of great interest and proximity of tourist routes can also justify this option.

The study of this sector enabled us to determine that the importance of the road system compared to the entire surface on the ground is almost 20%, that the floor-ground ratio revolves around 1.15; the courts and patios constitute 7.5% of the economic space and 12% of surface built for residential use (the surface of the court entered for half in the calculation of the area of floor); on the whole, one can estimate at 10.5% the surface of the court open to the sky. More than 25% of the surface on the ground is thus open to the air, the least is 1.15. For a dense habitat with 1 or 2 floors, this is not very far from the current urban norms.

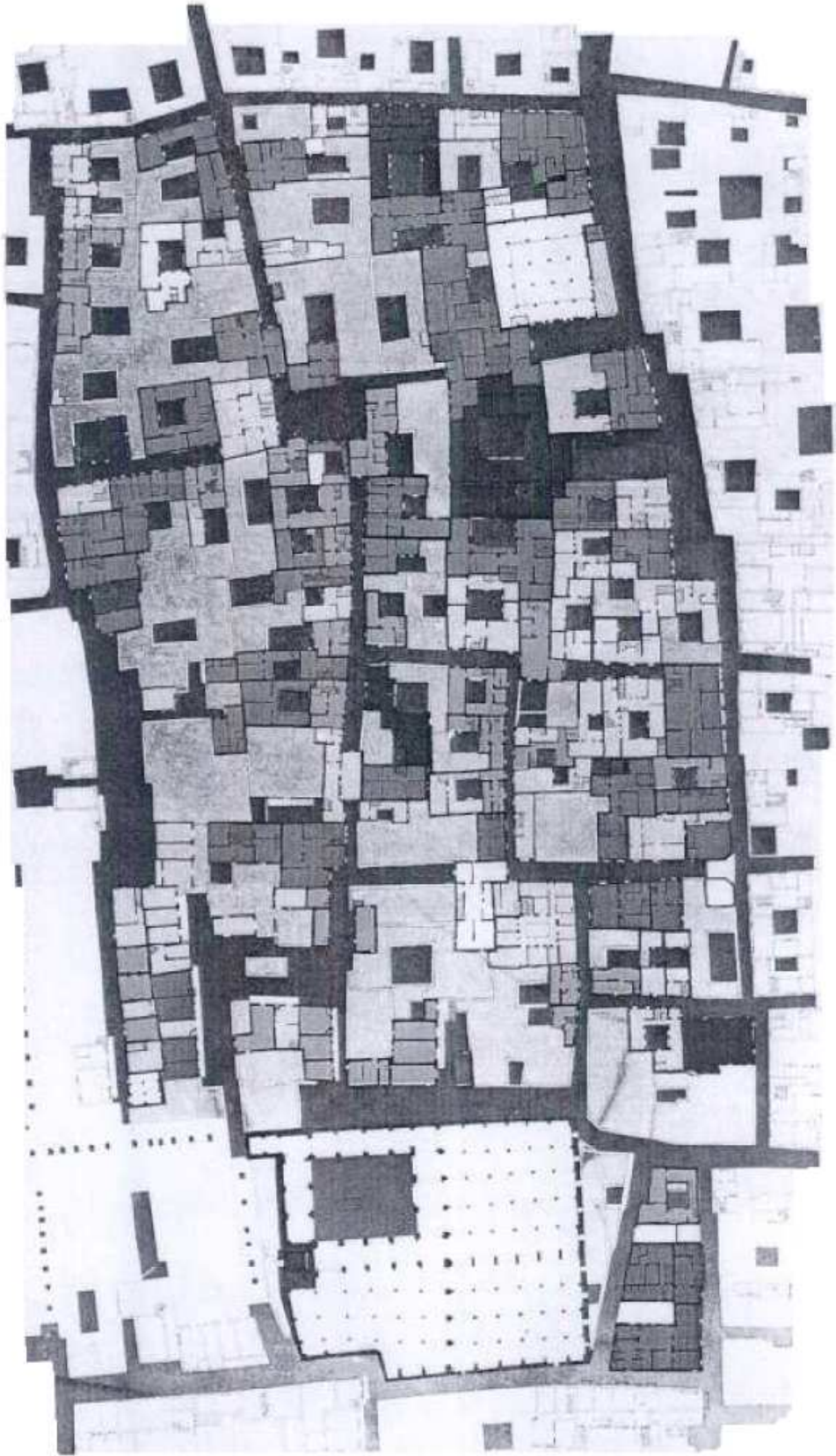
SECTEUR PILOTE (2Ha)
INTERET HISTORIQUE ET ARCHEOLOGIQUE

- construction
- ancienn de valeur bien conservée
- ancien de valeur sensiblement transformée
- récente
- récente

REZ-DE-CHAUSSEE



ETAGE



URBAN CONTEXT

THE PLAN OF INSTALLATION

Although a seaport, the town of Sfax has, by tradition, an agricultural vocation. This is the control tower which orders the agriculture in all the surrounding area. This is the privileged place of the trade of all the Tunisian south. Has not Sfax been called the capital of South?

Sfax is like a helping hand towards the West, towards the interior of the country. It has, from its origin, turned its back on the sea. And one can affirm that the morphology of the medina corresponds to this design. Traditional economic activities distribute themselves around Bab Djebli, in the north-western part of the medina, behind the large mosque. This is the public part of the city, where all the old souks and fondouks are concentrated; it is made up of a regular quadrilateral of 220 m by 180 m on the side and perhaps corresponding with the original core of the city.

At the end of 18th century, the port developed a new city, one built for the use of foreigners responsible for international business. Located at south-east of the old medina, it was surrounded soon by ramparts. The site had been selected because it was nearest to the port and also to be used as shield against a possible aggressive maritime invasion coming from the east.

From this moment, an urban axis was created in Sfax, connecting the gate of the sea, where now is found the municipality offices, to Bab Djebli, passing the large mosque. It is this time that dates the commercialization of the Rue de Bey, on the south-eastern side, made at the cost of an older residential sector. This commercial axis was extended by the Rue Centrale, the current Avenue Hedi Chaker.

EVOLUTION DU CENTRE COMMERCIAL

17^e siècle

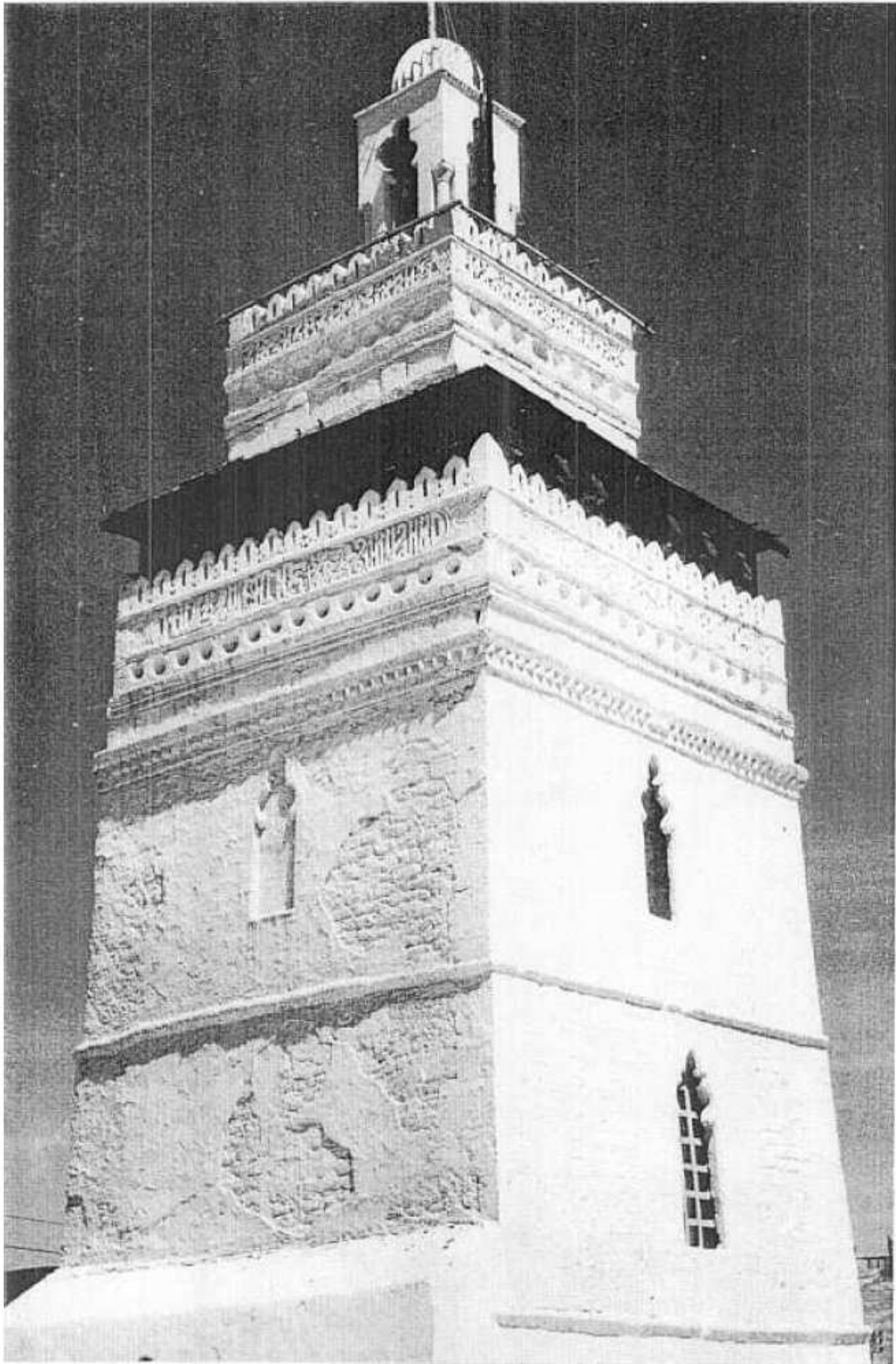


18^e et 19^e siècles

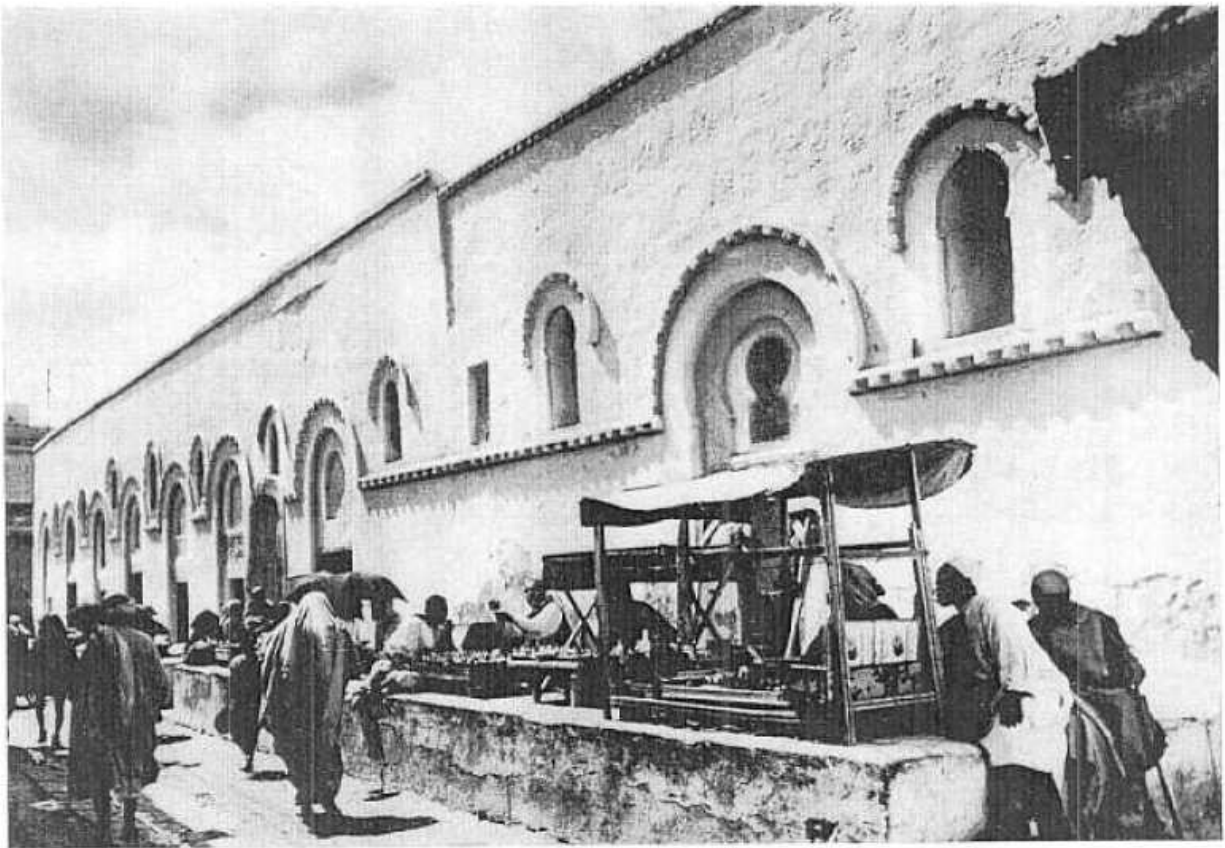


1970





After the bombardments from 1943, the *Ville Franque* was completely razed and a new block, designed by Zerh fuss, acquired the title of Commercial District, Avenue Hedi Chaker accepting responsibility for a large commercial activity. Although conceived in an autonomous and independent manner with respect to the medina, the new city is connected with the old. From the end of Avenue Hedi Chaker, the basin of the sailing ships, as far as with new market of Bab Djebli, thereby traversing all the medina, it confirms itself to be a commercial urban axis traversed by vast flow of exclusively pedestrian traffic. It seems to us only rational to support this natural draught, which is not only an essential guarantor of activity in the medina, but which offers to the whole city a invaluable chance to realize, at the same time, without expenses and effort, a pedestrian commercial axis. Historical city centers have in general found it difficult to release themselves from vehicles which asphyxiates them. The error should not be made, undoubtedly, as it would be, as one would think, to throw to through the medina a large artery, to facilitate - O illusion - traffic.

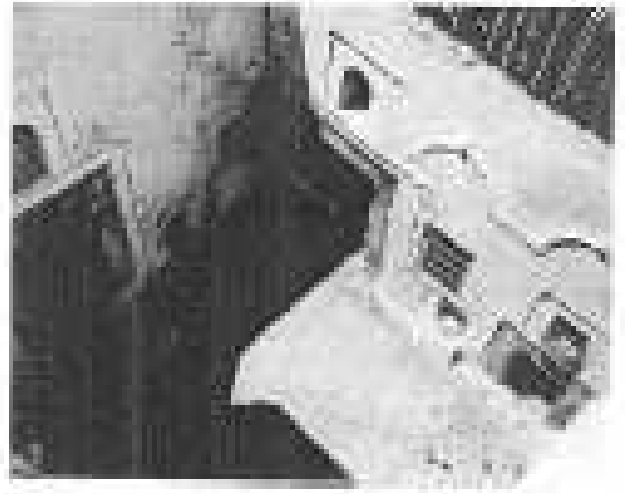


The organizational plan of Sfax envisaged in the zone of the old cisterns (Nasriah), which is next to the medina to the North-West a new high density residential center. This one cannot but approve. But the plan also envisages a major road, a sort of expressway with a width of 30

meters, which would skirt the medina on the level of Bab Djebli, in a north-eastern, south-western direction. This motorway would probably channel a large part of the Tunis - Libya through traffic. However, it is certain that a series of new roads connecting the new residential center to the commercial district, by circumventing the medina, would insulate it much more than do its ramparts. These roads are already traced, the rather weak automobile traffic still returns them ford-able. But what will it be tomorrow?

The future of the medina, let us repeat, is related to the makeup of a true downtown area which would also be advantageous elsewhere for Sfax and its suburbs together. The problem will be to join together in a homogeneous block these two centers of modern activity separated by a medina and to avoid any discontinuity. For to realize a peaceful coexistence of these three units, it is necessary, according to us, to design the downtown area at the scale of the pedestrian. This is so that the medina can take its full benefit since it itself was conceived at this scale.

It would be nevertheless illusory to neglect the place that motor vehicles will take in a full grown city, where this mode of transport is still the fastest and most practical means of movement. Hence comes our proposal to surround the agglomeration with a large capacity by-pass which would leave a series of routes of entry leading to vast parking zones. At first approximation, one should envisage within 10 years, parking for 3.000 cars (7.5 hectares of floor) in the immediate surroundings of the medina.



As an urban unit conceived at the scale of the pedestrian, the medina constitutes a 'blue chip' for the future. But this value will not be profitable, therefore viable, unless it is accessible to the car in its close vicinity.

GENERAL ANALYSIS OF THE MEDINA

The medina of Sfax is a vast quadrilateral of 600 meters by 400, of which the main axis Bab Djebli - Bab Diwan forms an angle of 22° with the North-South meridian. That corresponds to the orientation of the majority of the mosques of Sfax. The urban fabric is certainly the essential point which differentiates the medina of Sfax from all the other Arab cities of the Maghreb. The medina and its ramparts were built in the 9th century. Admittedly, there are not many large remains from this time, but one can reasonably suppose that the format has been little modified. One knows that it is difficult for a land register to change radically during the centuries, at least not without an intervention of great scale occurring. Unique because it is so regular, the layout is not without analogy to that of an ancient city, except the large monuments. We have already noted this, it is a fundamental reason for thinking that the ruins of Taparura lie under the current medina, even though no discovery has come to support this thesis.

With the grand mosque and the ramparts, the urban roadway system is certainly fundamental to preserve within the framework of a restoration of the medina, and something which today does not pose major problems. Let us take warning, however, that any idea of a monumental breakthrough is definitively remote.



The current facilities of the Arab city are presented in the following way:

- a) religious: the large mosque; 7 Friday mosques; 73 marabouts, tombs, zaouiats or medersa.
- b) medical: 3 Moorish baths; 2 modern public showers; 10 public toilets attached to the principal mosques.
- c) reception centers (Arab customers almost exclusively): 25 coffees; 13 restaurants; 7 hotels.
- d) educational: 3 elementary schools; 10 Koranic schools.
- e) cultural: the museum of arts and traditions popular; the [destourienne] unit.
- f) administrative: an office for the caïd; a post office.

POPULATION

Source: Census 1966.

GOVERNORATE OF SFAX

Surface	Population	Density
866,824 ha	425,109	0.49 /ha

MUNICIPALITY OF SFAX

(residential area)

Surface	Population	Density
3,710 ha	146,208	39.3 /ha

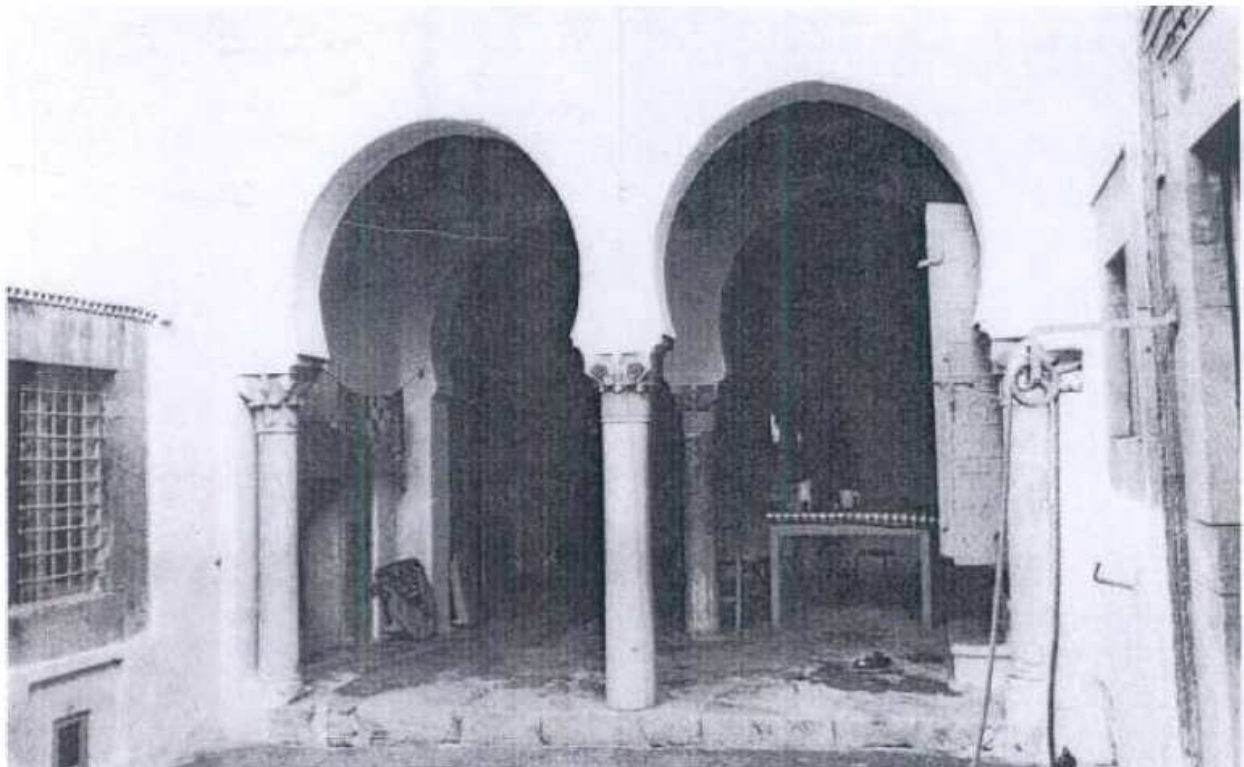
MEDINA OF SFAX

Surface	Population	Density
Quartier 1	0.25	0
	842	
	465	
	3,557	
Medina	23.99 ha	13,543 564 /ha

With the scale of the governorate, the urbanized population represents more than 50% of the total population. Outside of the urban area of Sfax, only 3 urban centers exist in the whole

extent of the governorate: Djebeniana (4,800 inhabitants), Chebba (7,000 inhabitants), Mahares (5,850 inhabitants). One can say that around Sfax the countryside is empty. In the course of the centuries, the small villages which surrounded the city have disappeared to the profit of the plantation. The exploitation of this immense forest of olive trees starts from the city which preserves until today an agricultural vocation. 4/5 of the town population, women including, have olive-trees and the rain, the drought, the olive-trees and the oil, here is the principal subject of the conversations.

It is extremely difficult to specify the population figures of the medina during these last hundred years and much more difficult still for the periods preceding. Various censuses, carried out by the French authorities, must be considered with the greatest caution. According to them, the medina population would have increased regularly during protectorate (6,247 inhabitants in 1936 per 13,543 in 1966, which would give a rate of increase in close to 120% in 30 years; in parallel the Tunisian population from the municipality of Sfax went from 34,600 to 79,500 inhabitants). It is perhaps easier to reason from after the architectural transformations of the city to grasp the demographic evolution of the medina since the beginning 19th century. From 1776, the date of construction of the southern suburb of the city, the urban balance is broken. Many





trades are created that depend on an 'intra-mural' residential sector abandoned by the foreigners (especially the Jews). The urban economic axis is lost, it will not cease to expand itself so much on the Arab side, that is to say medina, as on that of the Christians and Jews.

In the 19th century, there existed 1,503 houses and 333 apartments on the first floor. The population then must have been around ten thousand people, but it was distributed on an area appreciably larger than its current residential sector. Great concentrations

of jewelers, were made very recently at the expense of the residential space.

In addition to the European city the Protectorate saw the birth of an Arab suburb, *rabat*, which since then has not ceased the task of making olive oil in the north of the city. These popular districts whose morphology is semi-rural semi-urban, connect with the old city; they are the reception quarters of the rural population attracted by the industrial town. It should be noted that all these populations supply themselves not so much from the medina as the markets which are next to it. The economic sector of the city does not cease to grow. Most of the Sfaxienne middle-class which was confined in the Arab city saw, shortly after independence, open up to it a habitat previously reserved to the colonizers.

Since then, several demographic movements can be drawn: initially a clear tendency for the well-off families to definitively leave the proximity and discomfort of the medina, and to build in the outskirts of the city villas of the European type. The phenomenon of double seasonal residence is disappearing.

Moreover, the abandoned houses become investment properties for relatively modest customers, usually leaving the districts of the *rabat*; for those, the habitat in the medina constitutes an ascent in the social scale.

In the medina, twenty percent of the heads of household were born outside of the town of Sfax. More than one hundred new foreign families install themselves in the city each year, coming from the south, or east and especially from the Kerkennah islands.

In 1969, one could detect a relative reduction in population (of the order of 10% compared to 1966); it is necessary to remain nevertheless extremely careful with the interpretation given to these figures, because of the dual residence of 30% of the inhabitants and of great difficulties of the census.

The population pyramid reveals a net aging of this population compared to the population of the whole city; the limited number of young men from 20 to 30 years is interesting to note; 55% of the heads of household belong to the middle tertiary sector or lower; 60% of the heads of household are owners of their residences.

In conclusion, the current migratory assessment of the population of the Arab city seems difficult to ascertain. Nevertheless, the medium-term evolution is certain: increase in the population, impoverishment, ruralisation, "gourbification" (slum-dwellings) of the habitat. This is an extremely significant phenomenon in all the large Tunisian cities and particularly crucial in Tunis.

COMMERCIAL SPACE

Contents: 1.500 commercial buildings occupy 3.000 craftsmen, tradesmen and liberal professions of which 500 live the medina.

1. Commercial subspace

Grouped in one the central third of the medina (axis Bab Djebli - Bab Diwan), it has always had a influence that exceeds the ramparts by far; it is a commercial structure with an urban centre, a role to safeguard at all costs. The building typology is simple and traditional. One single room longer than wide opens onto the street by a simple door, the only opening. The trades are grouped in an uninterrupted group. The state of conservation is rather satisfactory, an obvious sign of the vitality of this sector; unfortunately transformations undergone these last decades have profoundly changed the aspect of the shops. The noisy windows and neon lights have replaced the wise ordinance of bygone days. But, the underlying pattern was seldom modified.

In fact, apart from the traditional souks, it does not seem a structure of important historical interest. Previously, the true shops were relatively rare and were all grouped in the specialized souks; the latter were surrounded by the mass of the craftsmen. It was undoubtedly at the end of last century, when the concepts of Western type of trade appeared, that a true revolution of the economic sector occurred in the medina. At that time, a multitude shops appeared, ate away at the houses on Rue du Bey, Rue de la Grande Mosque, Rue Sidi Ali el Karray and Rue Sidi bel Hassen. An area of little historical interest, but certainly an area in which the urban restoration must be significant, in which also one will be brought to great sacrifices. The sector economic of the medina must form an integral part downtown area; for this reason, it must be competitive, it does not want to disappear.

Some large commercial centers are currently considered in the medina. A food cooperative with multiple outlets is already seen today. Serious threats weigh on entire blocks.

The idea to have a maximum of windows is always in the mind of the promoter. Large centers are not necessarily excluded. But they would have to be arranged in interior spaces of the blocks and conceived at the same time in the spirit of the souk and the "American shopping center", various outlets or units opening on a semi-public, semi-private internal space and not outwards. That is with the aim of leaving the character of the street intact of which the narrowness opposes the idea of windows. The routing of the goods for these department stores must be studied with great care.

In fact, unless it can be extremely well regulated, in the commercial sector it would be necessary to favor the establishment or maintenance of trades that can adapt themselves to the existing architectural structure and with the difficulties of provisioning inherent in the medina. At the same time, it would be necessary to discourage the sales of products that are too bulky or too weighty which requires vast unit spaces.

2. Artisanal subspace

Located at the north of the commercial sector, between the large mosque and Bab Djebli, that is to say, exactly at the heart of the city, this is the sector which is loaded with history, which makes the medina of Sfax the most animated traditional city of Tunisia, where life is genuine and most authentic. This is also the sector which has undergone fewer modifications. The work of the craftsman of today does not require a space different from that of his ancestor; nevertheless, this district is more threatened, partly because it is in a state of advanced degradation, and partly because the craftsman is destined to disappear (except some

individuals that one could gather for example in the *souk des forgerons*, renovated for this purpose). It is enough to imagine the possible construction of a factory of shoes outside the medina: this possibility would involve disappearance of 800 shoe-makers working in close to 250 buildings. Changing the function of this area will be very delicate. It is however possible of to consider locating in the dead ends - *kasseria*, where currently the craftsmen locate themselves (shoe-makers, weavers and dyers) - commercial units that corresponding to the model referred to above.

TOURISM

Sfax is not a city with a tourist vocation: the mindset and activity of the inhabitants are clearly directed towards agriculture and industry. The poor city beach of the, became the site of a superphosphate factory whose smoke pollutes the atmosphere of the city. Actually, Sfax is an almost necessary relay between the North and the South, but the hotels established in the modern city seldom record stays of over one night on behalf of the passing tourists. Currently, nothing is made to retain these travelers, actually on the contrary.

The medina constitutes about the only possible attraction for a passing tourist. How to use it? All the tourist shops selling products of traditional crafts are currently located close to the hotels in the European city; one could encourage their setting up in the commercial area of the medina, along the well-traveled routes; these routes could be proposed to tourists in the shape of explanatory brochures, as well as by discrete and effective signs. In the space of two hours, it is possible for the tourist to walk from Bab Diwan to Bab Djebli, and suggest that he visits the grand mosque, the traditional souks, and other important religious buildings as well as the museum. Another longer circuit could enable the tourists to discover the residential districts and the Kasbah, transformed into a welcome center, for example. This last circuit could include a walk through the covered way between Bab Diwan and the kasbah. The improvement of the blacksmiths souk, the ancient fondouk in the middle of the artisans district, where some of the city's traditional craftsmen could be gathered, would also be highly desirable.

In short, in the medina of Sfax where, except for the large mosque and the ramparts, no monument has exceptional importance, the ideal would be to keep things much more subtle: a lifestyle or rather a traditional concept of life that is valid today and by this to preserve the character and the activity of the city. The absence of a great influx of tourists has perhaps made it possible to preserve this character which is the source of all the interest and charm of the

medina. Also, for tourism to be established it must be discrete cultural tourism, a delicate objective which begins with the education of the tourist himself.

RESIDENTIAL SPACE

The residential sector situated in part of the other commercial axis of the medina occupies in surface the larger 2/3 of the city. There exist currently 1,163 houses and 448 apartments (ali). Since the beginning of the 19th century, a considerable reduction in the number of the houses is noted, had with the increase of economic space, and an increase in apartments: one observes a phenomenon of division of the primary unit which still continues today.

DWELLING

1. State of the structures

The large majority of the residences are located in category: light degradation. Conservation of these structures is therefore not a fundamental problem (apart from renewal of the floors). Let us note that the floods of 1969 did not cause major damage in the medina of Sfax. It would be enough that funds of are found for moderate maintenance and the setting up of a small of team of semi-skilled workers from relevant construction industries to repair the degradations occurring, which very often are occupied by the poor margins of the population. The maintenance funds would undoubtedly support the application of the legislation to be put into force. Rightly, the citizen poorly understands that all he has to do is support the goal of conservation and restoration of a national cultural asset, as it is much more necessary that he lives there or works there.

2. Historical and archaeological interest

We established a classification covering 4 categories judging the historical and archaeological interest of each property. This classification is deliberately brief, the difficulty of dating earlier than this century is the simple explanation. The traditional Sfaxienne dwelling is a living organism of which we have attempted to assess the evolutionary qualities. .

Category 3 (10% of the dwellings):

- old dwelling preserved rather well (or restored);
- dwelling having architectural elements of value;

- old dwelling having a tourist and cultural value;
- dwelling having an exceptional character;
- dwelling having a historical interest (even recent).

It seems possible for the houses of this invaluable category to make a particular plan of restoration within the scope of the historic monuments; indeed their number does not exceed sixty units. A financial assistance from the authorities would allow owners to preserve them scrupulously, which would by no means prevent them from installing all the conveniences of modern comfort.

Category 2 (42% of the dwellings):

- old dwelling having undergone several unfortunate installations (staircase, woodwork, partitions, etc), the principal structure being preserved.

For these houses, the attitude should be much more flexible; one could in general preserve the important structures of the building and establish modern sanitary conveniences. One can with difficulty consider the preservation of the woodwork, except those of the facade.

Category 1 (45% of dwellings):

- relatively recent dwelling (50 years) of traditional spirit (pre-war);
- old dwelling completely distorted.

It would be enough for these houses to preserve a façade which passes unobserved. Any rational and harmonious installation could be allowed in the interior.

Category 0 (3% of the dwellings):

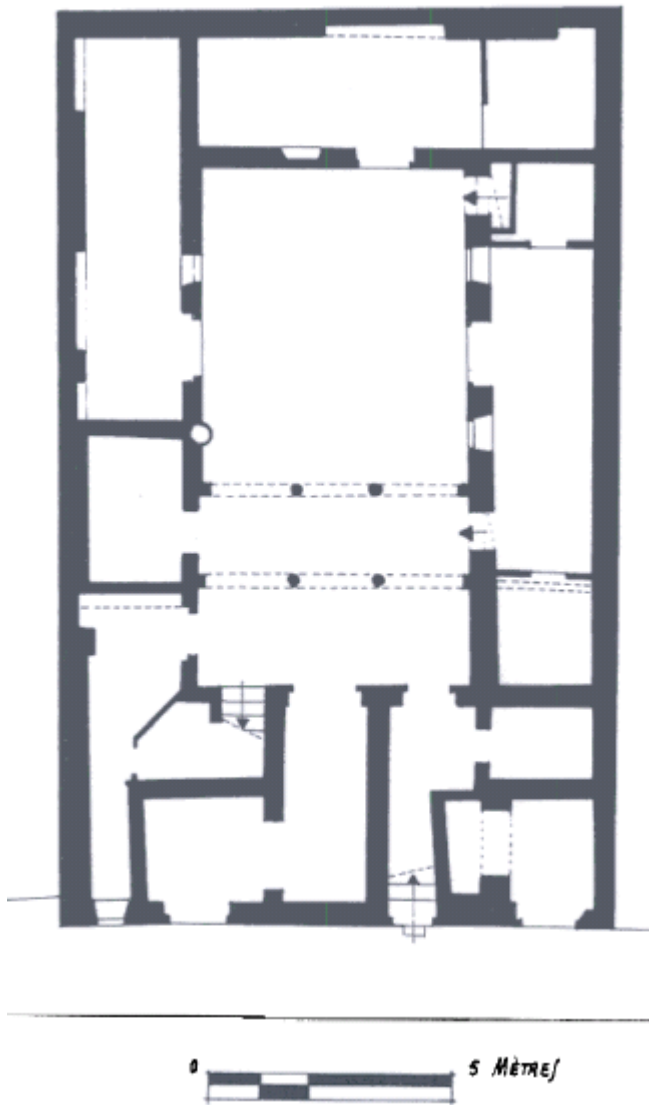
- recent dwelling (post-war), poorly integrated, in bad taste (pseudo-modern).

These houses should be destroyed or transformed as far as possible, which is difficult to practically consider since it is a recent constructions.

3. Description; study of types

In North Africa, the initial unit of the urban dwelling is, as in the Greco-Roman house, that of Samarra or Fostat, the central court, the patio. In this sense, the Sfaxienne dwelling sits in the tradition of the Mediterranean house.

An Arab house similar to the Arab houses of Fes, Algiers or Tunis, it offers however some local characteristics that we will try to point out.



The frontage, completely bare, is pierced on each floor with small windows with projecting grills; on the ground floor one, two or three doors give access to the house and possibly to a separate floor in the large houses; sometimes a third door opens onto a small stable formerly reserved for the owner's donkey. On the ground floor, one enters by a door with two panels, sometimes studded, in a frame almost always rectangular in carved yellow limestone. The zig-zag entrance which leads to the courtyard is in two parts separated by another door with only one casement doubling as a low entrance. Sometimes, a stone bench is built in first part of the entrance, allowing the owner to receive his visitors, with the separation from the street serving as family intimacy. The courtyard, which exists always in Sfax and which always is parallel to the street, constitutes a primary characteristic of the Sfaxienne dwelling. Formed of simple or of a double gantry with one, two or three arches, it is, as is the patio on which it opens, a true part of dwelling.

The courtyard communicates with the kitchen equipped with W.C., with the parts for provisions and the staircase which leads to the floor or to the terrace. The rectangular court is bordered on the two large sides by two very broad rooms, though not very deep, that embellish a split central arch; access is through doors with four casements, surmounted by a curved attic window; daylight is provided by two windows located on both sides of the door. At the bottom of the court, facing the columns of the courtyard, the main part, without upper floors, in the rich houses has a layout in the form of a T, of which middle area, furnished around the perimeter with couches, is used as living room. On the upper floor, accessible from the ground floor, one finds two or several additional rooms which are shared by a gallery of wooden columns and lintels opening onto the court and located above the courtyard. In the important houses, there

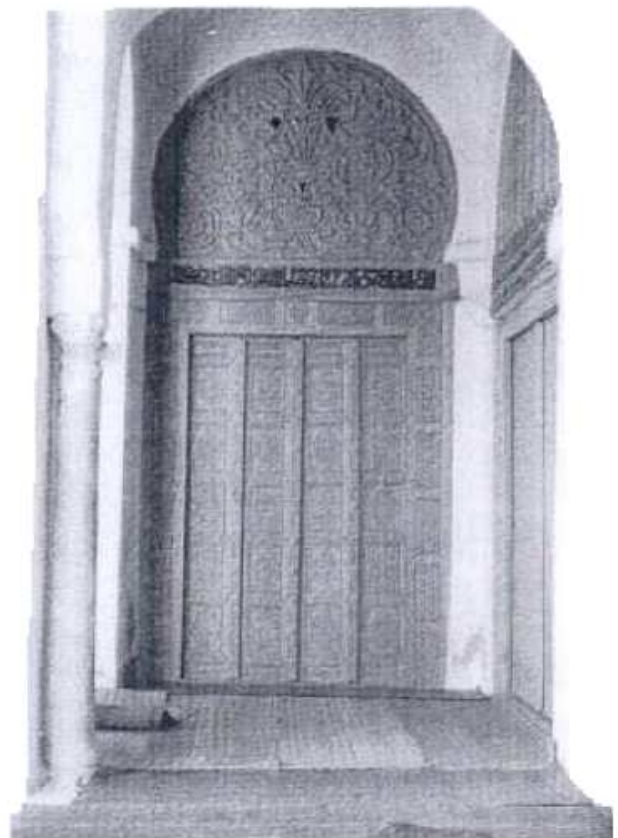
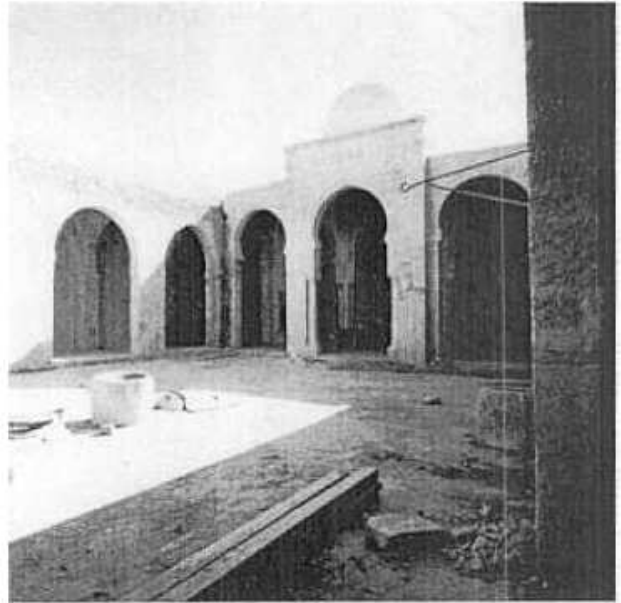
often are small apartments specific to the floor; they are provided with an independent entrance on the street which is arranged around a small patio.

The structure of the houses is relatively simple. walls are constructed of rough stone bound to limestone, with a thickness from 50 to 65 cm. Cut stone is only used for facings, pavements, arches and lintels. The beams of the ceilings are visible, sometimes they are simple branches. On this structure out of wood, the upper floor rests on beaten earth covered by tiling or by material ensuring that the terrace is sealed. Vaulting is rare, the edge of a vault is used to cover small sections or alcoves, an arch vault covers the cellars. A thick coating which will be whitewashed periodically covers all masonry, and sometimes the ground.

This is the same type of house, as we have just described, that one always finds in medina. Some parts may be omitted, but the same spirit presides over the architectural design.

4. Restoration of the dwellings

It is curious to note that in the medina 28% of households have a television set, but only 10% have a W.C. equipped with running water. This absurd juxtaposition in itself poses the problem of a population receptive to certain aspects of progress and not others. In this respect, all its education remains ahead, in insisting on the danger that there would be for her to renounce tradition at the time when she finds herself subjected to the enormous pressure of a imported civilization. Sociologically torn





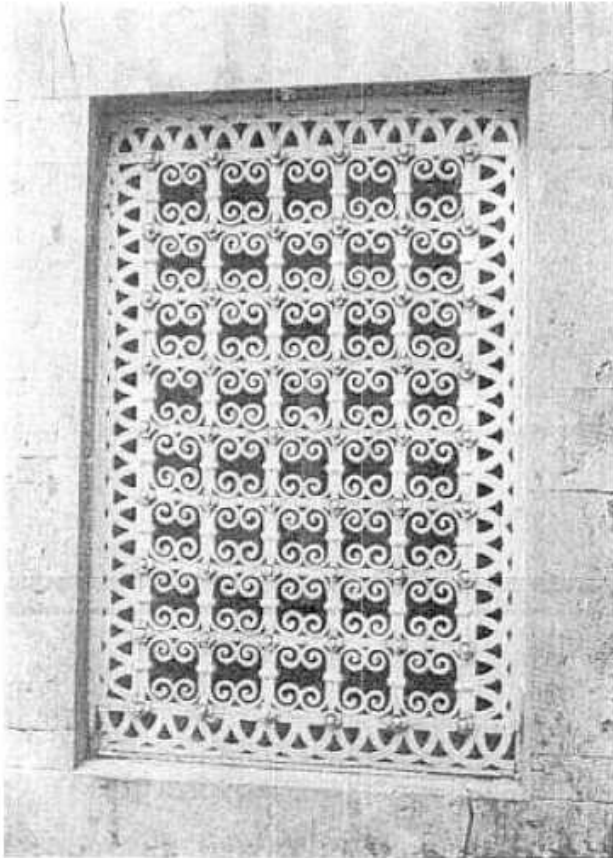
between its culture and modernity, the inhabitant of the medina seeks his way with difficulty. His pattern of life symbolizes for him his state of underdevelopment. It is normal that he wants to either leave it or transform it.

But he can act only in the very narrow context existing morphology. Practically, the Sfaxien, razing his residence in the medina to build anew, will have to locate his house on a piece of ground which will make

the best use possible of 8 by 15 meters and which will be surrounded by large blind walls. And it is hard to imagine that he can make anything fundamentally different than what he has just destroyed. However, for him, the architectural model the most likely to translate to success, validly, is the pseudo-modern villa whose proliferation chokes every large Tunisian city and Sfax in particular. It goes without saying that this model is in perfect opposition with the traditional dwelling of the medina.

Currently, any important transformation of a house in the medina completely disturbs its original structure. The tendency is to enlarge the rooms, to make them squarer, so as to introduce a table and chairs. One wants to open large windows onto the street that will block it when the neighbor opposite does the same. The chicane entrance does not escape the massacre, because it takes twice as much space as is necessary.

If the one accepts provisionally the assumption that the traditional dwelling unit is the most valid, it necessitates finding the means for today's Sfaxiens to live in an extremely rigid space. There is a great difference in design between an Arab house and a European house. Any renovation project must take it into account. In Europe, in most cases, one is satisfied to restore the facade, one wants to maintain the character of the street. Here, the street is nothing but an immense corridor pierced by a multitude of doors the often austere aspect of which does not give a suspicion of the richness of the traditional interiors. Life, indeed, starts in the patio, true heart of the house. For in preserving the function, one needs to integrate it into the routine of modern daily life. Living conditions change: inhabitants feel the need to cover their court in case



the weather is cold, or it rains, in case the sirocco blows or the sun is shine too strongly. Previously, one fastened a large fabric over the patio or from one terrace to another to protect it. Today, it would be necessary to find elegant solutions of translucent and removable roofs which would allow ventilation once closed.

The essential problem remains probably the planning of the internal space. The kitchen equipment in the part which is traditionally reserved for it does not present any technical difficulty. The installation of sanitary facilities in a part of a box room is also easy. The true difficulty, other than financial, will be to convince the owner that these installations are possible without it being necessary of to demolish all the walls. How to reuse these rooms of 2 by 8 meters of which occupants have a " legitimate" horror because there is no space for the ice cupboard of our grandfathers? A system of bunk beds and a wall cupboard at both ends should be able to solve the problem, along with the use of multi-stage, removable or collapsible tables for the dining room.



One of the great causes of the discomfort of the dwellings in medina is the rising damp which corrodes almost all of the walls to a height of able about a meter. This is a plague against which one can hardly see how to fight. Let us note that the association for the safeguard of the medina of Tunis, confronted with the same question, proposed the establishment of a district heating system.

It seems from elsewhere that it is necessary to think of high-tech solutions for many of problems. Refuse collection is one of those, and perhaps solution is the evacuation by suction conduits? All things of the field of the Utopia, but undoubtedly it is good of to think of it already?

5. Legislation

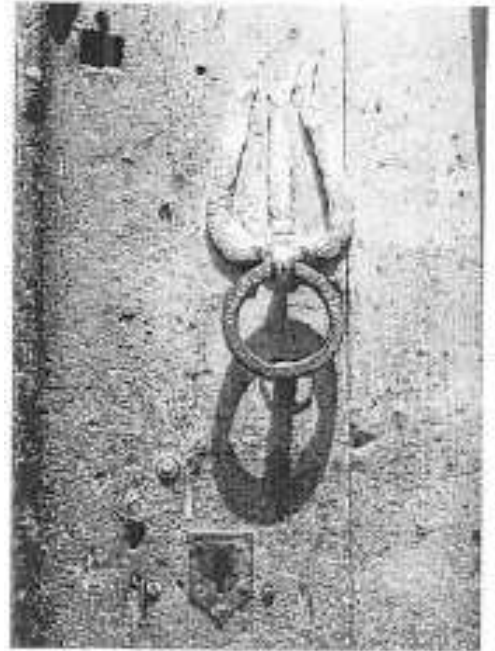
It is not useless to remember the recommendations of ICOMOS in Tunis in 1968, which proposed that interested governments adopt certain measures, including:

- an adaptation of the legislation and regulation of protection to the needs for the dynamic conservation of historical units, and creation of legislation to coordinate between the conservation monuments and units and economic and social development;

- the granting of tax and financial facilities to organizations and the people owning buildings located in the medinas, to ensure the cleansing and conservation under the responsibility and control of competent authorities.

The existing legislation which dates in general from around fifty of years ago is largely exceeded. Largely, it envisages the classification of buildings, a half-dozen in Sfax, with the obligation to consult the service of the historic buildings for the facades of new buildings in the medina. This is a passive legislation, little or not respected, of which the opposition to progress opposes any idea of development. Moreover, it is superbly unaware that the great interest of the Arab domestic structure domestic is located inside the building and that it is illusory to safeguard the aspect of the facades only. However let us note that since 1932, the authorities had become aware of overpopulation in the medina, hence the certified prohibition of any construction on a floor around a patio of less than 25 square meters (some levels, only, exceed this surface).

While waiting for texts which would apply to all medinas, considered as safeguarded sectors and which would be the only active yeast for restoration, one can already be thinking towards local measurements which would allow this to be avoided urgently for a time. In the residential sector of the medina, the density of population in 1969 reached nearly 800 inhabitants per hectare. One can reasonably estimate that this should decrease and approach 450 inhabitants per hectare (which corresponds to standards of comfort and of hygiene for



habitat on two levels). Moreover, all the signs indicate that an increase of population accompanies a degradation of the habitat. The first measures must thus tend to slow down the increase in the population.

It is necessary to prohibit any new construction of floors for residential use (including the wash-houses which are often rooms in that disguise). This prohibition is particularly valid in the courts of houses along with the second floor.

It is necessary to prevent any division of the traditional unit space of the house, a division by sale or by heritage which causes the space to be split. In corollary, all new opening of doors of residential or commercial use on the roadway system must be prohibited. Any installation which tends to divide a traditional house into several distinct residences has the consequence of destroying the character of the residence irremediably; without improving the conditions of comfort or hygiene, quite to the contrary. The structure of the habitat evolves then into a shantytown. Let us point out that in Sfax, the unit space is never disproportional and that it can without too many difficulties adapt to the needs of one marital family.

The land tenure is rather unique in the medina, the property more often relating to the floor rather than to the ground. It is not rare to find ten different owners for one house. This one is then divided officially by parts of floors (at the ground floor or upstairs). Any large scale operation of restoration will necessarily run up against the multitude of owners; a valid solution would be to keep the spirit of the system, but to carry out a massive expropriation of land by the State. Allowances would be refunded over the long term and provide an office to help the owners of the medina. They would obviously remain owners of their surface of pavement or of floor. Other possibilities can be considered such as the placing in joint possession of the medina land with the formation of a trade union of owners. One of the advantages of this kind of system would be to be able to empty completely one or more small blocks, to renovate them under the best conditions and to reinstall the inhabitants by redistributing them in the property on a floor space arranged, higher or lower than the initial surface. The operation would be the object of an assessment, the goal being to give in property to each family a functional and sufficient floor space, while allowing the State to control the development of the site by granting the property of the ground to it.

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SUMMARY

The second ICOMOS symposium on the conservation, restoration and revival of centers of historical interest was held in Tunis in 1968 and, as provided for in the recommendations it adopted, planning offices were subsequently set up to study programs for the protection of the medinas of Tunisia. Those of Tunis, Kairouan and Sfax were thus successively made the object of a thorough study; in the case of Sfax this primarily consisted in a complete survey of the buildings accompanied by a socio-economic enquiry into the housing situation. A pilot sector about five acres in size has been subjected to more intensive study so that restoration work can start there promptly.

It has been felt preferable, when re-planning Sfax, to provide for a complete and unified town centre with the medina forming a part of it. As an urban district designed for the pedestrian, the medina is a safe investment for the future, provided, however, its immediate surroundings are accessible to car-drivers.

The Sfax medina is a huge quadrilateral measuring 660 by 440 yards; it was founded in the 9th Century, probably as the successor to the Roman town of Taparura.

If it is to be an integral part of the town centre, its economic activity must remain competitive. The craftwork quarter runs the most severe risk; however it could be developed in the style of a shopping centre retaining the general principle of the souk. The vast majority of the homes are in an almost satisfactory condition, though with the enormous population influx there has been a great increase in the number of floors in buildings, involving subdivision of the original units of accommodation.

The vital problem, before any effective renovation work can be envisaged, is that of devising a dynamic code of legislation capable of halting the transformation of the medina into slum property.